Application Number 10/602,537 TRANSMITTAL Filing Date June 23, 2003 **FORM** First Named Inventor Tang, Hongxing (to be used for all correspondence after initial filing) Art Unit 2811 **Examiner Name** not yet assigned Total Number of Pages in This 6 Attorney Docket Number 009195-000410US Submission ENCLOSURES (Check all that apply) Fee Transmittal Form ☐ Drawing(s) After Allowance Communication to Group Appeal Communication to Board of Appeals Fee Attached Licensing-related Papers and Interferences Petition Appeal Communication to Group (Appeal Amendment/Reply Notice, Brief, Reply Brief) Petition to Convert to a After Final Proprietary Information Provisional Application Power of Attorney, Revocation Affidavits/declaration(s) Status Letter Change of Correspondence Address Terminal Disclaimer Other Enclosure(s) Extension of Time Request (please identify below): Request for Refund Return Postcard Express Abandonment Request International Search Report CD, Number of CD(s) References Cited (23) Information Disclosure Statement The Commissioner is authorized to charge any additional fees to Deposit Certified Copy of Priority Remarks Account 20-1430. Document(s) Response to Missing Parts/ Incomplete Application Response to Missing Parts under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Townsend and Townsend and Crew LLP Firm Gerald T. Gray Reg. No. 41,797 Individua! Signature May 5, 2004 Date

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name	Marta R. Vanegas				
Signature	Marta	Vanegas	Date	May 5, 2004	

60209426 v1

I hereby certify that this correspondence is being deposited with the United

States Postal Service as first class mail in an enve

Commissioner for Patents P.O. Box 1450

Alexandria, VA 22313-1450 May 5, 2004

TOWNSEND and TOWNSEND and CREW LLP

Attorney Docket No.: 009195-000410US Client Reference No.: CIT-3713

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Hongxing Tang et al.

Application No.: 10/602,537

Filed: June 23, 2003

For: GIANT PLANAR HALL EFFECT IN EPITAXIAL FERROMAGNETIC SEMICONDUCTOR DEVICES

Examiner: not yet assigned

Art Unit: 2811

INFORMATION DISCLOSURE

STATEMENT UNDER 37 CFR §1.97 and

§1.98

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Copies of the references are enclosed. It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

Also enclosed is a copy of the International Search Report for the corresponding PCT application, PCT/US03/19863.

Hongxing Tang et al.

Application No.: 10/602,537

Page 2

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that <u>no fee is required</u> for submission of this statement. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,

Gerald T. Gray Reg. No. 41,797

TOWNSEND and TOWNSEND and CREW LLP Two Embarcadero Center, Eighth Floor San Francisco, California 94111-3834

Tel: 925-472-5000 Fax: 925-472-8895

GTG:mrv 60179389 v1

PTO/SB/08A (08-03)

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use as many sheets as necessary)

Application
Filing Date
First Name
Art Unit
Examiner

Sheet

	Complete if Known
Application Number	10/602,537
Filing Date	June 23, 2003
First Named Inventor	Tang, Hongxing
Art Unit	2811
Examiner Name	not yet assigned
Attorney Docket Number	009195-000410US

			U.S. PATENT DOCUMENTS+								
		Document Number									
Examiner Initials*	Cite No. ¹	Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear						
	1	US-3,818,328	06-18-1974	Zinn							
	2	US-4,618,901	10-21-1986	Hatakeyama et al.							
	3	US-4,816,946	03-28-1989	Kira et al.							
	4	US-5,390,061	02-14-1995	Nakatani et al.							
	•										

			-	FOREIGN PA	TENT DOCUM	ENTS		
Examiner Initials*	Cite No. ¹	Country Code ³	oreign Patent Doc Number ⁴	ument Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T⁰
	5	wo	2004/001805	A2	12-31-2004	California Institute of Technology		
								닏
								$\sqcup \sqcup$
								oxdot

Examiner Signature	Date Considered	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional).

Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04.

Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).

For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible.

Applicant is to place a check mark here if English language Translation is attached.

60179389 v1

Substitute	for form 1449B/PT	ro			Complete if Known
INIEO		ı Dic	CLOCUDE	Application Number	10/602,537
			CLOSURE	Filing Date	June 23, 2003
SIAI	EMEN! E	3Y A	PPLICANT	First Named Inventor	Tang, Hongxing
				Art Unit	2811
(ι	ise as many sh	eets as	necessary)	Examiner Name	not yet assigned
Sheet	2	of	3	Attorney Docket Number	009195-000410US

		NON PATENT LITERATURE DOCUMENTS	_
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T;
	6	Abolfath, M. et al., "Theory of magnetic anisotropy in III _{1-x} Mn _x V Ferromagnets," Phys. Rev. B., Vol. 63, p. 054418 (2001)	
	7	Cowburn, R.P. et al., "Multijump magnetic switching in in-plane magnetized ultrathin epitaxial Ag/Fe/Ag(001) films," Phys. Rev. Lett., Vol. 79, p. 4018 (1997)	
	8	Dietl, R. et al., "Hole-mediated ferromagnetism in tetrahedrally coordinated semiconductors," Phys. Rev. B, Vol. 63, p. 195205 (2001)	
-	9	Dietl, R. et al., "Zener model description of ferromagnetism in zinc-blende magnetic semiconductors," Science , Vol. 287, p. 1019 (2000)	
	10	Divincenzo, D.P., "Quantum computing and single-qubit measurements using the spin-filter effect (invited)," J. Appl. Phys., Vol. 85, p. 4785 (1999)	
	11	Fukumura, T. et al., "Magnetic domain structure of a ferromagnetic semiconductor (Ga,Mn)As observed with scanning probe microscopes," Physica E., Vol. 10., p. 135 (2001)	
	12	Gwo, S. et al. "Surface reconstruction and ultrasmooth morphology of high-temperature grown A1As(001)-3x2," Proc. 23rd Int. Conf. Phys. Semiconductors , Berlin 1996, Scheffler, M. and R. Zimmermann, eds., World Scientific, Singapore (1996)	
	13	Hong, K. and N. Giordano, "Approach to microscopic magnetic measurements," Phys. Rev., Vol. 51, No. 15, p. 9855 (1995)	
	14	Jan, J.P., "Galvanomagnetic and thermomagnetic effects in metals," in <u>Solid State Physics</u> , Seitz, F. and D. Turnbull, eds., New York Academic Press, Vol. 5, pp. 1-96	
	15	König, J. et al., "Theory of magnetic properties and spin-wave dispersion for ferromagnetic (Ga,Mn)As," Phys. Rev. B., Vol. 64, p. 194423 (2001)	
	16	Ma, Z. et al., "Solid-state reaction-mediated low-temperature bonding of GaAs and InP wafers to Si substrates," Appl. Phys. Lett., Vol. 64, No. 6, p. 772 (1994)	
	17	Ohno, H. et al., "Electric-field control of ferromagnetism," Nature, Vol. 401, p. 944 (2000)	
	18	Ono, T. et al., "Propagation of a magnetic domain wall in a submicrometer magnetic wire," Science , Vol. 284, p. 468 (1999)	
	19	Prinz, G., "Magnetoelectronics," <u>Science</u> , Vol. 282, p. 1660 (1998)	
	20	Sander, D. et al., "Film stress and domain wall pinning in sesquilayer iron films on W(110)" Phys. Rev. Lett. , Vol. 77, p. 2566 (1996)	
	21	Schmidt, G. and L.W. Mollenkamp, "Electrical spin injection using dilute magnetic semiconductors" Phisica E., Vol. 10, p. 84 (2001)	

Examiner	Date	
Signature	Considered	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached.

Substitute	for form 1449B/PT	0			Complete if Known
INITO	DAR A TION	DIC	CL OCUBE	Application Number	10/602,537
			CLOSURE	Filing Date	June 23, 2003
SIAI	EMENI B	YA	PPLICANT	First Named Inventor	Tang, Hongxing
				Art Unit	2811
(u	ise as many sh	eets as	s necessary)	Examiner Name	not yet assigned
Sheet	3	of	3	Attorney Docket Number	009195-000410US

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	22	Stoner, E.C. and E.P. Wohlfarth, "A mechanism of magnetic hysteresis in heterogeneous alloys," Philos. Trans. R. Soc. London A, Vol. 240, p. 74 (1948)	
	23	Wunderlich, J. et al., "Influence of geometry on domain wall propagation in a mesoscopic wire" IEEE Trans. Magn. Vol. 37, p. 2104 (2001)	
l			

Examiner	Date	
Signature	Considered	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached.